

THE CLAIMS

Having thus described the invention, what is CLAIMED is:

5 1. A spindle-mountable core for supporting a roll of web material, comprising:

 a tubular body having an outer surface for receiving and supporting a length of web material wound thereupon, and having a generally cylindrical inner surface defining a bore through said body for receiving a spindle inserted thereinto from
10 one end, a major portion of said bore having a first diameter;

 a plurality of circumferentially spaced ribs extending axially along said bore and radially inwardly from said inner surface of said body, said ribs being constructed for slidable engagement with corresponding groove structure formed into the outer surface of a mounting spindle;

15 stop means on said core for engaging a spindle inserted into said bore through said body from said one end so as to limit the depth of insertion of the spindle and thereby define a fully mounted position of said core thereon; and

 collar structure on said inside surface of said body effectively circumscribing said bore and having a contact surface with an effective inside diameter
20 smaller than said first diameter, said collar structure being disposed near the end of said bore opposite to said one end and presenting said contact surface thereof for frictional engagement with circumferential contact means on a spindle in said fully mounted position of said core thereon.

25 2. The core of Claim 1 wherein said collar structure and said contact surface thereof are circumferentially continuous.

 3. The core of Claim 1 wherein said collar structure is of substantially uniform radial thickness.

4. The core of Claim 1 wherein said stop means comprises an engagement element operatively disposed between said collar structure and said opposite end of said bore.

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5. The core of Claim 4 wherein said engagement element comprises a circumferential shoulder disposed radially inwardly of said contact surface of said collar structure.

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6. The core of Claim 5 wherein ring structure on said inside surface of said body effectively circumscribes said bore adjacent said opposite end thereof, said ring structure being of substantially uniform thickness, greater than the thickness of said collar structure, and providing said circumferential shoulder.

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7. The core of Claim 1 wherein each of said ribs is of a uniform circumferential width along its entire length.

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8. An assembly for supporting a roll of web material, comprising an elongate spindle comprised of a shaft portion and a forward end portion having circumferentially disposed external contact means thereon, said spindle having a plurality of groove structures that extend axially along at least said shaft portion and that open forwardly and radially outwardly thereof; and a core, for supporting a roll of web material, disengageably mounted on said spindle, said core comprising:

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a tubular body having an outer surface for receiving and supporting a length of web material wound thereupon, and having a generally cylindrical inner surface defining a bore through said body for receiving said spindle inserted thereinto from one end, a major portion of said bore having a first diameter;

a plurality of circumferentially spaced ribs extending axially along said bore and radially inwardly from said inner surface of said body, said ribs being constructed for slidable engagement with said groove structure of said spindle and being so engaged;

5 stop means on said core for engaging said spindle so as to limit the depth to which said spindle can be inserted into said bore through said body from said one end, thereby defining a fully mounted position of said core thereon; and

 collar structure on said inside surface of said body effectively circumscribing said bore and having a contact surface thereon with an effective inside diameter smaller than said first diameter, said collar structure being disposed near the
10 end of said bore opposite to said one end, and said contact surface thereof frictionally engaging said circumferentially disposed external contact means on said spindle for retention of said core in said fully mounted position of said core thereon.

15 9. The assembly of Claim 8 wherein said collar structure and said contact surface thereof are circumferentially continuous.

 10. The assembly of Claim 8 wherein said collar structure is of substantially uniform radial thickness.

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 11. The assembly of Claim 8 wherein said stop means comprises an engagement element operatively disposed between said collar structure and said opposite end of said bore.

25 12. The core of Claim 11 wherein said engagement element comprises a circumferential shoulder disposed radially inwardly of said contact surface of said collar structure.

13. The assembly of Claim 12 wherein ring structure on said inside surface of said body effectively circumscribes said bore adjacent said opposite end thereof, said ring structure being of substantially uniform thickness, greater than the thickness of said collar structure, and providing said circumferential shoulder.

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14. The assembly of Claim 8 wherein said groove structure defines at least one slot, and wherein at least one of said ribs is dimensioned to frictionally engage said one slot-defining structure of said spindle in which said one rib is engaged, said one rib and slot-defining structure cooperating with said collar structure and spindle contact means for retention of said core on said spindle in said fully mounted core position.

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15. The assembly of Claim 14 wherein said core is retained on said spindle, against axial displacement, with a holding force of about 4 to 6 pounds.

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16. The assembly of Claim 14 wherein said at least one rib is of uniform circumferential width along its entire length.

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17. An assembly for supporting a roll of web material, comprising an elongate spindle comprised of a shaft portion and a forward end portion having circumferentially disposed external contact means thereon, said spindle having a plurality of groove structures that extend axially along at least said shaft portion and that open forwardly and radially outwardly thereof; and a core, for supporting a roll of web material, disengageably mounted on said spindle, said core comprising:

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a tubular body having an outer surface for receiving and supporting a length of web material wound thereupon, and having a generally cylindrical inner surface defining a bore through said body for receiving said spindle inserted thereinto from one end, a major portion of said bore having a first diameter;

a plurality of circumferentially spaced ribs extending axially along said bore and radially inwardly from said inner surface of said body, said ribs being constructed for slidable engagement in said groove structure of said spindle and being so engaged;

5 stop means on said core for engaging said spindle so as to limit the depth to which said spindle can be inserted into said bore through said body from said one end, thereby defining a fully mounted position of said core thereon; and

collar structure on said inside surface of said body effectively circumscribing said bore and having a contact surface thereon with an effective inside diameter smaller than said first diameter, said collar structure being disposed near the
10 end of said bore opposite to said one end, and said contact surface thereof frictionally engaging said circumferentially disposed external contact means on said spindle for retention of said core in said fully mounted position of said core thereon; said groove structure of said spindle defining at least one slot, and at least one of
15 said ribs of said core being dimensioned to frictionally engage said slot-defining structure of said spindle, in which said one rib is engaged, to thereby cooperate with said collar structure and spindle contact means for retention of said core on said spindle in said fully mounted core position.

20 18. The assembly of Claim 17 wherein said core is retained on said spindle, against axial displacement, with a holding force of about 4 to 6 pounds.

19. The assembly of Claim 17 wherein said at least one rib is of uniform circumferential width along its entire length.

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20. The assembly of Claim 17 wherein said collar structure and said contact surface thereof are circumferentially continuous.

21. The assembly of Claim 17 wherein said collar structure is of substantially uniform radial thickness.

22. The assembly of Claim 17 wherein said stop means comprises an engagement element operatively disposed between said collar structure and said opposite end of said bore.

23. The assembly of Claim 22 wherein said engagement element comprises a circumferential shoulder disposed radially inwardly of said contact surface of said collar structure.

24. The assembly of Claim 23 wherein ring structure on said inside surface of said body effectively circumscribes said bore adjacent said opposite end thereof, said ring structure being of substantially uniform thickness, greater than the thickness of said collar structure, and providing said circumferential shoulder.